

REMARKS

The Examiner has rejected claims 1-18 under 35 U.S.C. 103(a) as being unpatentable over Rothblatt U. S. Patent No. 6,105,060 in view of Blum et al U. S. Patent No. 6,182,141 (hereinafter Blum).

The Examiner states as per claim 1, Rothblatt teaches a mobile satellite telecommunications system comprising: at least one user terminal (e.g. Abstract); at least one satellite in earth orbit (e.g. Abstract); and at least one gateway bi-directional coupled to a data communications network (e.g. col. 3, lines 40-45). The Examiner continues that Rothblatt further teaches a message from a one user terminal via said at least one satellite (e.g. col. 2, lines 43-55). The Examiner goes on to contend that Rothblatt does not specifically teach said at least one gateway comprising a controller for initiating a Domain Name Service (DNS) query in response to a Uniform Resource Locator (URL) received in a message. However, the Examiner states, Blum teaches at least one gateway comprising a controller for initiating a Domain Name Service (DNS) query in response to a Uniform Resource Locator (URL) received in a message (e.g. col. 3, lines 20-25). The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rothblatt with Blum and the motivation would have been to provide name resolution for the satellite link.

Applicants respectfully submit that in Rothblatt '060 there is described a system for providing global and portable Internet access to low cost user terminals comprising an Internet service provider gateway and a broadcast station for providing multimedia information from the gateway to the user terminals via a direct radio broadcast geostationary satellite. User terminals each comprise a direct radio broadcast receiver and a transceiver for communicating with a low earth orbit (LEO) satellite. User terminals transmit Internet access requests, menu selections and other backhaul signals to the gateway via the transceiver. The broadcast station transmits information requested by the user from the gateway to a specific user terminal by providing identification codes in the broadcast programs. The user terminals are programmable to receive all broadcast programs but to demodulate and demultiplex only those broadcast channels addressed to the user terminal. Internet access is available simultaneously with reception of satellite direct broadcasts of audio programs.

Applicants respectfully submit that at col. 3, lines 40-45 of Rothblatt '060 there is disclosed "The direct radio broadcast system preferably consists of three geostationary satellites (one of which is indicated at 20 in Fig. 1), low cost radio receivers or user terminals, and associated ground networks."

Applicants respectfully submit that at col. 2, lines 43-55 of Rothblatt '060 there is indicated "In another aspect, the communication link comprises a low earth orbit satellite and the communication device comprises a low earth orbit satellite transceiver.

"In a still further aspect, the present invention is directed to a method for providing low-cost, global, portable user devices with Internet access. The method comprises the steps of generating a request for Internet access from a portable user terminal and transmitting the request to an Internet service provider using a first communication link."

Applicants respectfully contend, as the Examiner admits, that Rothblatt does not specifically teach said at least one gateway comprising a controller for initiating a Domain Name Service (DNS) query in response to a Uniform Resource Locator (URL) received in a message.

At col. 3, lines 20-25 of Blum '141 there is disclosed "A request for communication or communications request as the terms are used herein may be a connection request directed to a particular server, either local or remote, as identified by a server name or Internet Protocol (IP) address, or the communications request may be an address resolution request such as a Domain Name Services (DNS) request to determine an IP address from a given server name provided in a Uniform Resource Locator (URL) for example."

Applicants respectfully submit that in Blum '141 there is disclosed "A transparent proxy. In a computer system, a layered service provider intercepts a communications request from a client application in the native protocol of the communications request wherein the communications request requests communication with a remote server. The service provider bundles and passes the communications request to a predetermined port. A transparent proxy application listening on the predetermined port receives the communications request in the native protocol of the request and establishes the requested communication."

Applicants respectfully contend that Blum is nowhere concerned with satellite communications as claimed in the instant application and furthermore there is no suggestion, implication or any motivation whatsoever to combine the teachings of Blum with those of Rothblatt as contemplated by the Examiner in order to reject the claims of the instant application other than Applicants' own specification and claims. Applicants respectfully contend that although, as the Examiner contends, at col. 3, lines 20-25 of Blum, the nomenclature Domain Name Service (DNS) and Uniform Resource Locator (URL) are to be found, they are taken out of context in a system which is not remotely connected with that as claimed in the instant invention and are not properly combinable with Rothblatt, there being no motivation whatsoever to do so nor any implication or suggestion in either patent directed to non-analogous inventions that they be so combined.

Therefore, Applicants respectfully submit that said at least one gateway comprising a controller for initiating a Domain Name Service (DNS) query in response to a Uniform Resource Locator (URL) received in a message from a one user terminal via said at least one satellite is nowhere to be found in Rothblatt '060 and this conspicuous deficiency can in no way be remedied by any improper combination of Blum '141.

The Examiner goes on to say as per claim 9, it is rejected for similar reasons as stated above.

Applicants respectfully submit that for the same reasons cited above with regard to claim 1, which are hereby respectfully incorporated by reference, claim 9 is patentably distinguishable over Rothblatt and Blum, alone or in any improper combination.

The Examiner goes on to say as per claim 16, it is rejected for similar reasons as stated above.

Applicants respectfully submit that for the same reasons cited above with regard to claims 1 and 9, which are hereby respectfully incorporated by reference, claim 16 is seen to be patentably distinguishable over Rothblatt and Blum, alone or in any improper combination.

The Examiner goes on to say as per claim 2, Rothblatt teaches a mobile satellite telecommunications system but does not specifically teach further comprising a DNS server that is co-located with said gateway. However, the Examiner states Blum teaches a DNS server that is co-located with said gateway (e.g. Fig. 5). The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rothblatt with Blum, the motivation being to provide name resolution for the satellite link.

Applicants recognize as the Examiner admits that Rothblatt does not specifically teach further comprising a DNS server that is co-located with said gateway as required by claim 2. Applicants respectfully contend that the careful reading of the description of Fig. 5 at col. 7, lines 15 et seq. of Blum confirms that there is neither a gateway nor a gateway co-located with a DNS server as required by claim 2. Further, as previously indicated, Blum is not at all concerned with mobile satellite telecommunications system and is not properly combinable with Rothblatt as suggested by the Examiner for the reasons recited above which are hereby respectfully incorporated by reference. Therefore, Applicants respectfully disagree that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rothblatt with Blum, the motivation being to provide name resolution for the satellite link.

Furthermore, Applicants are at a loss to discern wherein a gateway is anywhere mentioned in the description of Fig. 5 nor is shown representatively in Fig. 5.

The Examiner goes on to say as per claim 3, Rothblatt teaches a mobile satellite telecommunications system, but does not teach wherein said controller receives an Internet Protocol (IP) address in response to said DNS query, and wherein said controller replaces said URL with said IP address and forwards said message to a destination server identified by said IP address (e.g. col. 3, lines 20-30). The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rothblatt with Blum, the motivation being to provide name resolution for the satellite link.

Applicants respectfully submit that in Blum at col. 3, lines 20-30 there is a general discussion of a request directed to a particular server, either local or remote, as identified by a server name or Internet Protocol (IP) address, or the communications request may be an address resolution request such as a Domain Name Services (DNS) request to determine an IP address from a given server name provided in a Uniform Resource Locator (URL) for example. "An IP address, as is well-known to those of skill in the art uniquely identifies a server or subnetwork on the Internet. An IP address along with a port number uniquely identifies a process on a particular server on the Internet."

As Applicants have respectfully recited above, these recitations in Blum are directed to a transparent proxy in a computer system comprising a layered service provider which intercepts communications requests from a client application in the native protocol of the communications request wherein the communications request requests communication with a remote server. For reasons submitted above, which are hereby respectfully incorporated by reference, Applicants have clearly shown that Blum is not at all directed to mobile satellite telecommunications systems and therefore is not properly combinable with Rothblatt in any manner to reject the instant claims. Applicants respectfully submit that there is no suggestion, implication or teaching which would motivate one of ordinary skill in the art to combine the teachings of Rothblatt with Blum, aside from the necessity to attempt to cure the admitted conspicuous absence in Rothblatt with regard to the DNS query and replacement of the URL by the controller with an IP address as set out in claim 3 which fails for reasons recited above.

The Examiner goes on to say as per claim 10, it is rejected for similar reasons as stated above.

Applicants respectfully submit that claim 10 is a method claim as set out in claim 9 wherein the gateway receives an Internet Protocol (IP) address in response to the DNS query and replaces said URL with said IP address before transmitting said message to said data communications network. This is nowhere to be found, literally or substantively, in either of Rothblatt or Blum in any improper combination and claim 10 is seen to be

patentably distinguishable over both Rothblatt and any improper combination with Blum for reasons set out above which are hereby respectfully incorporated by reference.

The Examiner goes on to say as per claim 4, Rothblatt does not specifically teach a mobile satellite telecommunications system wherein said at least one satellite is in a non-geosynchronous orbit. However, the Examiner states Blum teaches a mobile satellite telecommunications system wherein said at least one satellite is in a non-geosynchronous orbit (e.g. Abstract). The Examiner concludes it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rothblatt with Blum, the motivation being to provide data communications with a non-geosynchronous satellite system.

Applicants respectfully submit, as the Examiner admits, that Rothblatt does not teach a satellite in a non-geosynchronous orbit but is limited to same. Furthermore, for reasons recited above, Applicants respectfully submit Blum neither teaches a mobile satellite telecommunications system nor such a system wherein at least one satellite is in non-geosynchronous orbit in the Abstract or elsewhere for reasons recited above which are hereby respectfully incorporated by reference. Therefore, Applicants respectfully do not agree it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rothblatt with Blum, the motivation being to provide data communications with a non-geosynchronous satellite system.

The Examiner goes on to say as per claim 11, it is rejected for similar reasons as stated above.

Applicants respectfully contend that in claim 11 is defined the method in claim 9 wherein said at least one satellite is in non-geosynchronous orbit. All of the limitations of claim 9 have been shown to be patentably distinguishable over Rothblatt and any improper combination with Blum for reasons recited above which are hereby respectfully incorporated by reference and furthermore, as the Examiner admits, Rothblatt is nowhere concerned with satellites in non-geosynchronous orbit.

The Examiner goes on to say as per claim 5, Rothblatt does not specifically teach a mobile satellite telecommunications system wherein said at least one satellite comprises an on-board processor (OBP) that is responsive to said URL for selecting a gateway and for routing said message to said selected gateway. However, the Examiner contends that Blum teaches a mobile satellite telecommunications system wherein said at least one satellite comprises an on-board processor (OBP) that is responsive to said URL for selecting a gateway and for routing said message to said selected gateway (e.g. col. 12, lines 50-55). Therefore, the Examiner concludes it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rothblatt with Blum,

the motivation being to provide data communications with a non-geosynchronous satellite system.

Applicants note respectfully that col. 12, lines 50-55 of Blum reside in the claim section of Blum, namely all of claim 23 and part of claim 24 which Applicants assume was not intended by the Examiner. However, in order to be responsive, Applicants have reviewed lines 50-55 of the remaining columns of the Blum reference and do not find said recitations or anywhere in Blum is there disclosed or taught a mobile satellite telecommunications system wherein at least one satellite comprises an on-board processor (OBP) that is responsive to said URL for selecting a gateway and for routing said message to said selected gateway as required by claim 5. Furthermore, Applicants respectfully contend, as admitted by the Examiner, that the above recited limitation is no where to be found in Rothblatt; that Blum is not in any way concerned with mobile satellite telecommunications systems and therefore any combination of Blum with Rothblatt is improper, there being no suggestion or implication to do so in either reference nor any motivation. Therefore, Applicants respectfully disagree that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rothblatt with Blum, the motivation being to provide data communications with a non-geosynchronous satellite system.

The Examiner goes on to say as per claim 12, it is rejected for similar reasons as stated above.

Applicants respectfully submit that claim 12 is directed to a method as recited in claim 9 wherein said satellite is responsive to said URL for selecting a gateway and for routing said message to said selected gateway.

Applicants respectfully submit that no where are the limitations in dependent claim 12 to be found in Rothblatt or in any improper combination with Blum and claim 12 is seen to be patentably distinguishable over both references for reasons recited above which are hereby respectfully incorporated by reference.

The Examiner goes on to say as per claim 6, Rothblatt does not specifically teach a mobile satellite telecommunications system wherein said satellite comprises at least one inter-satellite link (ISL) transceiver for routing said message through at least one further satellite. The Examiner contends that Blum teaches a mobile satellite telecommunications system wherein said satellite comprises at least one inter-satellite link (ISL) transceiver for routing said message through at least one further satellite (e.g. col. 3, lines 45-50). The Examiner concludes it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rothblatt with Blum, the motivation being to provide data communications with a non-geosynchronous satellite system.

Applicants respectfully submit that in Blum at col. 3, lines 45-50 there is stated "To package in this context means to add information to the communications request required to forward the request to the proxy server through the various software layers."

Applicants respectfully submit that they are at a loss to understand how this in any way teaches an inter-satellite link transceiver for routing said message through at least one further satellite as required by the instant claim, no less a mobile satellite telecommunications system which as explained above is nowhere to be found in Blum. Furthermore, Applicants acknowledge, as the Examiner admits, that Rothblatt is deficient in not teaching at least one inter-satellite link transceiver for routing said message through at least one further satellite. Therefore, Applicants respectfully disagree that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rothblatt with Blum, the motivation being to provide data communications with a non-geosynchronous satellite system.

The Examiner goes on to say as per claim 13, it is rejected for similar reasons as stated above.

Applicants respectfully submit that claim 13 is directed to the method in claim 12 wherein the message is routed through at least one inter-satellite link (ISL) to at least one further satellite. Applicants respectfully submit that claim 13 is patentably distinguishable over either Rothblatt or Blum, alone or in any improper combination, for the reasons recited above which are hereby respectfully incorporated by reference. Furthermore, nowhere in Rothblatt which is concerned with mobile satellite communications is a message routed through at least one inter-satellite link to at least one further satellite as required by claim 13.

The Examiner goes on to say as per claim 18, it is rejected for similar reasons as stated above.

Applicants respectfully submit that in claim 18 the method as defined in claim 16 is set out wherein said satellite routes said message to said selected gateway through at least one inter-satellite link (ISL) to at least one further satellite.

Applicants respectfully submit that claim 18 is patentably distinguishable over Rothblatt or Blum, alone or in any improper combination, for reasons recited above which are hereby respectfully incorporated by reference. Further, Applicants respectfully submit that nowhere in Rothblatt which is directed to mobile satellite communications is there to be found the limitation wherein the satellite routes said message to said selected gateway through at least one inter-satellite link (ISL) to at least one further satellite.

The Examiner goes on to say as per claim 7, Rothblatt does not specifically teach a mobile satellite telecommunications system wherein said OBP is responsive to a portion of said URL that identifies a geographical region where a destination server identified by said

URL is located, and operates to initiate a routing of said message to a gateway that serves said identified geographical region. Further, the Examiner states Blum teaches a mobile satellite telecommunications system wherein said OBP is responsive to a portion of said URL that identifies a geographical region where a destination server identified by said URL is located, and operates to initiate a routing of said message to a gateway that serves said identified geographical region (e.g. col. 6, lines 37-50). Therefore, the Examiner concludes it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rothblatt with Blum, the motivation being to provide data communications with a non-geosynchronous satellite system.

Applicants respectfully submit that in claim 7 the mobile satellite telecommunications system as defined in claim 5 is set out wherein the OBP is responsive to a portion of said URL that identifies a geographical region where a destination server identified by said URL is located, and operates to initiate a routing of said message to a gateway that serves said identified geographical region. Applicants respectfully submit that no where in Rothblatt is this recited limitation to be found and furthermore no where in Blum is said limitation to be found, no less is any recitation with regard to mobile satellite telecommunications systems to be found. Therefore, Applicants respectfully disagree it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Rothblatt with Blum, the motivation being to provide data communications with a non-geosynchronous satellite system. Furthermore, claim 7 is seen to be patentably distinguishable over both Rothblatt and Blum for reasons recited above with regard to claim 1 which are hereby respectfully incorporated by reference.

The Examiner goes on to say as per claim 8, it is rejected for similar reasons as stated above.

Applicants respectfully submit that claim 8 is a mobile satellite telecommunications system as set out in claim 5 wherein said OBP is responsive to a portion of said URL that identifies a country where a destination server identified by said URL is located, and operates to initiate a routing of said message to a gateway that serves said identified country. Applicants respectfully submit that no where is this limitation to be found in either Rothblatt or Blum, alone or in any improper combination. Furthermore, claim 8 is seen to be patentably distinguishable over Rothblatt and Blum, alone or in any improper combination, for reasons recited above which are hereby respectfully incorporated by reference.

The Examiner goes on to say as per claim 14, it is rejected for similar reasons as stated above.

Applicants respectfully submit that in claim 14 is set out the method in claim 12 wherein the gateway is selected in response to a portion of said URL that identifies a

geographical region where a destination server identified by said URL is located, and wherein said message is routed to a gateway that serves said identified geographical region. Applicants respectfully submit that no where is this limitation found, suggested, taught or implied in Rothblatt and claim 14 is seen to be patentably distinguishable over both Rothblatt and Blum in any improper combination for reasons recited above which are hereby respectfully incorporated by reference.

The Examiner goes on to say as to claim 15, it is rejected for similar reasons as stated above.

Applicants respectfully submit that in claim 15 is set out the method in claim 12 wherein the gateway is selected in response to a portion of said URL that identifies a country where a destination server identified by said URL is located, and wherein said message is routed to a gateway that serves said identified country. Applicants respectfully submit that no where is said limitation to be found in Rothblatt nor in Blum and that claim 15 has been seen to be patentably distinguishable over both Rothblatt and Blum, alone or in any improper combination, for reasons recited above with regard to method claim 9 which are hereby incorporated by reference.

The Examiner goes on to say as per claim 17, it is rejected for similar reasons as stated above.

Applicants respectfully submit that in claim 17 there is defined a method as set out in claim 16 wherein said gateway is selected in response to a portion of said URL that identifies a country where said destination server identified by said URL is located, and wherein said message is forwarded to said gateway that serves said identified country.

Applicants respectfully submit that said limitation is no where to be found in Rothblatt or Blum, alone or in any improper combination, and that claim 17 is seen to be patentably distinguishable over both Rothblatt and Blum for reasons recited above with regard to claim 9 and others which are hereby respectfully incorporated by reference.

Applicants respectfully submit that all of the claims presently under prosecution have been shown to contain patentable subject matter and to be patentably distinguishable over the prior art of record, Rothblatt and Blum, alone or in any improper combination. Accordingly, Applicants respectfully request that this application be reviewed and reconsidered in view of the above remarks and that a Notice of Allowance be issued at an early date.

Respectfully submitted,



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